

**Iowa Department of Natural Resources  
Environmental Protection Commission**

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**ITEM**

**5**

**DECISION**

**TOPIC**

**Contract - University Hygienic Laboratory (UHL) - Impaired waters monitoring and assessment**

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**Recommendation:**

The Department requests Commission approval of a contract for the amount of \$381,952 with the University Hygienic Laboratory. The contract covers a variety of water monitoring and assessment activities related to the development of restoration plans for impaired water bodies. These activities are designed to obtain specific information needed to better define the impairments through the stressor identification process, and for the development of water quality restoration plans or Total Maximum Daily Loads (TMDLs). Site specific data are needed to better define the impairments and identify pollutant loads or other non-pollutant based stressors, such as habitat alteration that contribute to the impairments. The data collected under this contract will help technical staff make these determinations. The contract period is from July 1, 2008 – June 30, 2009.

**Funding Source:**

Federal funding for this contract is provided through Section 319 of the Clean Water Act.

**Background:**

In this contract, UHL will collect data for 5 lakes and 12 stream segments that have been prioritized for TMDL development. Various types of stream monitoring and assessment activities will be conducted, including: biweekly and storm event sampling for conventional and toxic water quality parameters; continuous monitoring of dissolved oxygen and water temperature; surveys of benthic macroinvertebrates and fish; stream flow measurement; physical habitat assessment; sediment and water contaminant screening. Lake sampling will include the collection of 2 additional samples per lake during the summer period (to be added to the ambient water monitoring schedule). Samples will be analyzed in the laboratory for a suite of water quality parameters and trophic state indicators such as nitrogen, phosphorus, suspended solids, and turbidity. A vertical depth profile of dissolved oxygen, pH, specific conductance, and water temperature will also be obtained on each sampling occasion.

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Environmental Services Division  
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| <b>Monitoring Costs by TMDL Waterbody-FY09</b>  |                      |
|---|----------------------|
| <b>Marrowbone Creek</b>   | <b>Variable Cost</b> |
| Water quality monitoring  | \$38,390.42          |
| <b>Yellow River</b>   |                      |
| Water quality monitoring  | \$42,313.02          |
| Bioassessment   | \$4,199.99           |
| <b>Norfolk Creek</b>  |                      |
| Water quality monitoring  | \$18,620.73          |
| <b>Bear Creek</b>   |                      |
| Water quality monitoring  | \$18,620.73          |
| <b>Suttle Creek</b>   |                      |
| Water quality monitoring  | \$18,620.73          |
| <b>Silver Creek</b>   |                      |
| Water quality monitoring  | \$17,211.08          |
| <b>Long Dick Creek</b>  |                      |
| Water quality monitoring  | \$47,686.98          |
| Bioassessment   | \$7,425.71           |
| <b>Lyons Creek</b>  |                      |
| Water quality monitoring  | \$49,269.23          |
| Bioassessment   | \$5,843.46           |
| <b>Wapsipinicon River</b>   |                      |
| Bioassessment   | \$6,116.23           |
| <b>Roberts Creek</b>  |                      |
| Bioassessment)  | \$6,616.31           |
| <b>East Pine Creek</b>  |                      |
| Bioassessment   | \$3,824.99           |
| <b>Walnut Creek</b>   |                      |
| Bioassessment   | \$5,480.95           |
| <b>Lakes Monitoring</b>   | \$55,418.43          |
| (Lake McBride, Lake of the Hills, Black Hawk Lake, Big Creek Lake, Briggs Woods Lake) |                      |
| Misc Supplies   | \$6,000.00           |
| Shipping  | \$2,000.00           |
| Subtotal  | \$353,659.00         |
| F&A (8%)  | \$28,292.72          |
| <b>Total</b>  | <b>\$381,951.72</b>  |